by Lt. Kerry May

Veral weeks ago, our squadron was assisting with a multi-organizational, specialwarfare exercise. For about two weeks, we flew missions involving fastrope, cast and recovery, SPIE rigging and insertion. We were working with teams from other organizations and even from other countries, but the people we briefed with tended to be the same people every day. The missions had been going well, and we were starting to work together more efficiently.

On the day of our incident, we were scheduled for fastroping ops in several areas. We had three hours of flight time set aside to pick up several teams and have them fastrope to different places. Our briefs covered times and locations of the picks and drops. For the past several days, the units we worked with had sent a representative (the jumpmaster) to our flight briefs. We would give our standard NATOPS brief, and the rep would brief us on the mission.

On this particular day, the jumpmaster seemed pleased to find that HAC and aircrew were the same people he had flown with the day before. They'd had a successful flight, and he knew this crew was familiar with the missions. The brief did not need to be extensive, since the crew knew the landing areas and other details, such as radio frequencies and call signs. We touched on how to secure loose gear in the back of the aircraft.

The special-warfare units had a small dilemma with their gear. Because someone had been injured during a prior exercise, they weren't allowed to fastrope wearing their rucksacks during practice. They still wanted to simulate the quickness of a true fastrope evolution, so they rigged the gear in the back of the helicopter so it could be lowered to the ground as the team fastroped from the front of the aircraft. They tied the rucksacks together and placed them on the ramp. A belay line was attached to them, going up through a figure-eight fixture and back into the cabin. The plan was to lower the ramp, swing the rucksacks out like a pendulum, and lower them via the belay line. We'd been using this method throughout the week, and it worked. When briefing this part of the event, the



crew agreed that the belay of the gear would be accomplished in the same manner as the day before.

After the brief, we went flying. We completed two insertions, one that required landing in the LZ and a second requiring a fastrope evolution. We were getting ready for the third insertion, another fastrope. We landed and picked up the next team of people. There were more people than we had briefed, but we determined we could accommodate the extra troops. Once all was secure in the back, we took off.

We had been flying slower than 100 knots most of the day because our hoist boom was extended. The crewman in the back told us the boom had been stowed, so we decided to speed up to 120 knots. At approximately 100 knots and 800 feet, one of our crewmen asked us to slow down because one of the packs had flown out the back. We started to slow when we heard a loud bang and felt a jolt to the aircraft. At the same time, the crewmen informed us that all of the packs had flown out the back.

Worrying that the packs might have fallen on houses, we turned around to look for them. As we were turning, the crewmen told us we needed to land. At the same time, the aircraft developed a jerking lope. We started to look for a place to land and asked the crewmen what was wrong with the aircraft. They said the rope had gone up through the rotor arc. We immediately spotted a small baseball field with adequate clearance to land. As we came into a hover over the landing area, the jerkiness stopped and the aircraft smoothed out. We landed as soon as we knew it was safe. The passengers exited, and we shut down. The whole incident lasted approximately two minutes.

Once we were safe on deck, we discussed what had happened and assessed the damage. We learned that the rucksacks had not been tied to the deck. The belay line they were attached to was not tied down to the deck either. The ramp had been slightly lower than full up, allowing wind to come in from the side and get in front of the packs. When a small pack went out the back of the aircraft, it pulled the heavier packs out with it. The belay line spooled out without stopping until it fouled on a pad eye. Once it stopped, the force snapped the line to the packs. The line was then free to go up into the rotor arc of the aft head, where it wrapped around the upper controls several times.

Inspecting the damage, we saw that the rope had torn through the cowling. Some of the cowling was missing, and some of it had been pushed into the flight controls. The rope itself was wrapped four times about the controls. We could see that as the head spun, the rope had tightened until the pitch-change links bent inward and almost came loose. We could have lost control of the aircraft.

Most of the lessons learned had to do with the brief. We never discussed how we would tie down the equipment. The crew chief assumed the jumpmaster was the expert in the back and did not observe the stowage of the gear. We should have briefed that the crew chief was responsible for that duty. If we had properly briefed the subject, we would have realized that the jumpmaster did not know our procedures for stowing loose gear in the back. We assumed that since the mission had gone well the day before, it would go well again, and the crew failed to ask important questions during the brief.

Another problem was the slightly lowered ramp. We didn't realize the wind could push an object sitting on the ramp out of the aircraft.

Never assume the mission specialists know more about how to rig something in our aircraft than you do. Get the details and have a clear idea about what is going to happen. We all knew not to have loose gear in the cabin, but we assumed that the crew chief secured the gear, and the crew chief assumed that the jumpmaster was an expert. Lt. May flies with HC-5.